SECTION 08 1416

FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:
1. Solid-core doors with wood veneer faces.
2. Factory finishing flush wood doors.

B. Related Sections include the following:
1. Section 08 1116 "Aluminum Frames" for door frames.
2. Section 08 7100 "Door Hardware" for hardware on standard swing doors.

1.3 SUBMITTALS

A. **Product Data**: For each type of door. Include details of core and edge construction, louvers, and trim for openings. Include factory-finishing specifications.

B. **Shop Drawings**: Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data; location and extent of hardware blocking; and other pertinent data.
   1. Dimensions and locations of mortises and holes for hardware.
   2. Dimensions and locations of cutouts.
   3. Undercuts.
   4. Requirements for veneer matching.
   5. Doors to be factory finished and finish requirements.
   6. Fire ratings for fire doors.

C. **Samples for Selection**: Color charts consisting of actual materials in small sections for the following:
   1. Faces of Factory-Finished Doors: Plastic laminate, 6 inches square, for each color, texture, and pattern selected.

1.4 QUALITY ASSURANCE

A. **Source Limitations**: Obtain flush wood doors through one source from a single manufacturer.

B. **Coordinate door installation** with RF-magnetic shielding vendor.

C. **Manufacturer Qualifications**: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body (as applicable) and is a certified participant in AWI's Quality Certification Program.

1. Provide AWI Quality Certification Labels or an AWI letter of licensing for Project indicating that doors comply with requirements of grades specified.

### 1.5 DELIVERY, STORAGE, AND HANDLING

A. **Comply** with requirements of referenced standard and manufacturer's written instructions.

B. **Package doors individually** in plastic bags or cardboard cartons.

C. **Mark each door on top and bottom rail** with opening number used on Shop Drawings. Do not mark tops of doors where visible from above.

### 1.6 PROJECT CONDITIONS

A. **Environmental Limitations:** Do not deliver or install doors until building is enclosed, wet work is complete, and HVAC system is operating and will maintain temperature and relative humidity at occupancy levels during the remainder of the construction period.

### 1.7 WARRANTY

A. **Special Warranty:** Manufacturer's standard form, signed by manufacturer, Installer, and Contractor, in which manufacturer agrees to repair or replace doors that are defective in materials or workmanship, have warped (bow, cup, or twist) more than 1/4 inch in a 42-by-84-inch section, or show telegraphing of core construction in face veneers exceeding 0.01 inch in a 3-inch span.

   1. Warranty shall be in effect during the following period of time from date of Substantial Completion:
   

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

A. **Basis of Design:** Contract Documents are based on products specified below to establish a standard of quality. Other available manufacturers may be considered, provided deviations are minor and design concept as expressed in the Contract Documents is not changed, as judged by the Architect.

   1. Manufacturer: Masonite; Graham/Maiman

B. **Available Manufacturers:** Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

   1. Eggers Industries; Architectural Door Division.
   2. Masonite; Graham/Maiman.
   3. Oshkosh Door Company.
   4. VT Industries Inc.
   5. Masonite Architectural; Marshfield-Algoma.
2.2 DOOR CONSTRUCTION, GENERAL

A. Low-Emitting Materials: Fabricate doors with adhesives and composite wood products that do not contain urea formaldehyde.

B. Doors for Transparent Finish:
1. Grade: Premium (Grade AA faces).
2. Veneer Species and Cut: Select clear walnut, quarter sawn.
   a. Stain: As selected by Architect from manufacturer’s full range of colors.
   b. Veneer thickness: Manufacturer’s standard.
4. Assembly of Veneer Leaves on Door Faces: Balance match.
5. Pair and Set Match: Provide for doors hung in same opening or separated only by mullions.
6. Room Match: Provide door faces of compatible color and grain within each separate room or area of building.
7. Stiles: Same species as faces.

2.3 SOLID-CORE DOORS

A. Particleboard Cores: Comply with the following requirements:
1. Particleboard: ANSI A208.1, Grade LD-2, made with binder containing no urea-formaldehyde.

B. Interior Veneer-Faced Doors:
2. Construction: Five plies with stiles and rails bonded to core; entire unit abrasive planed before veneering.
3. Blocking: Provide wood blocking in particleboard-core doors as needed to eliminate through-bolting hardware.
4. Provide doors with glued-wood-stave or structural-composite-lumber cores instead of particleboard cores for doors indicated to receive exit devices.

2.4 FABRICATION

A. Fabricate doors in sizes indicated for Project-site fitting.
1. Comply with clearance requirements of referenced quality standard for fitting.

B. Openings: Cut and trim openings through doors to comply with applicable requirements of referenced standards for kind(s) of door(s) required.
1. Light Openings: Trim openings with moldings of material and profile indicated.
PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine doors and installed door frames before hanging doors.
   1. Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with level heads and plumb jambs.
   2. Reject doors with defects.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Hardware: For installation, see Division 8 Section "Door Hardware."

B. Manufacturer's Written Instructions: Install doors to comply with manufacturer's written instructions, referenced quality standard, and as indicated.

C. Job-Fitted Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors. Machine doors for hardware. Seal cut surfaces after fitting and machining.
   1. Clearances: Provide 1/8 inch at heads, jambs, and between pairs of doors. Provide 1/8 inch from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 1/4 inch) from bottom of door to top of threshold.
      a. Comply with NFPA 80 for fire-rated doors.
   2. Bevel non-fire-rated doors 1/8 inch in 2 inches (3-1/2 degrees) at lock and hinge edges.
   3. Bevel fire-rated doors 1/8 inch in 2 inches (3-1/2 degrees) at lock edge; trim stiles and rails only to extent permitted by labeling agency.

3.3 ADJUSTING

A. Operation: Rehang or replace doors that do not swing or operate freely.

B. Finished Doors: Replace doors that are damaged or do not comply with requirements. Doors may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION